#### 5. OPEN SPACE

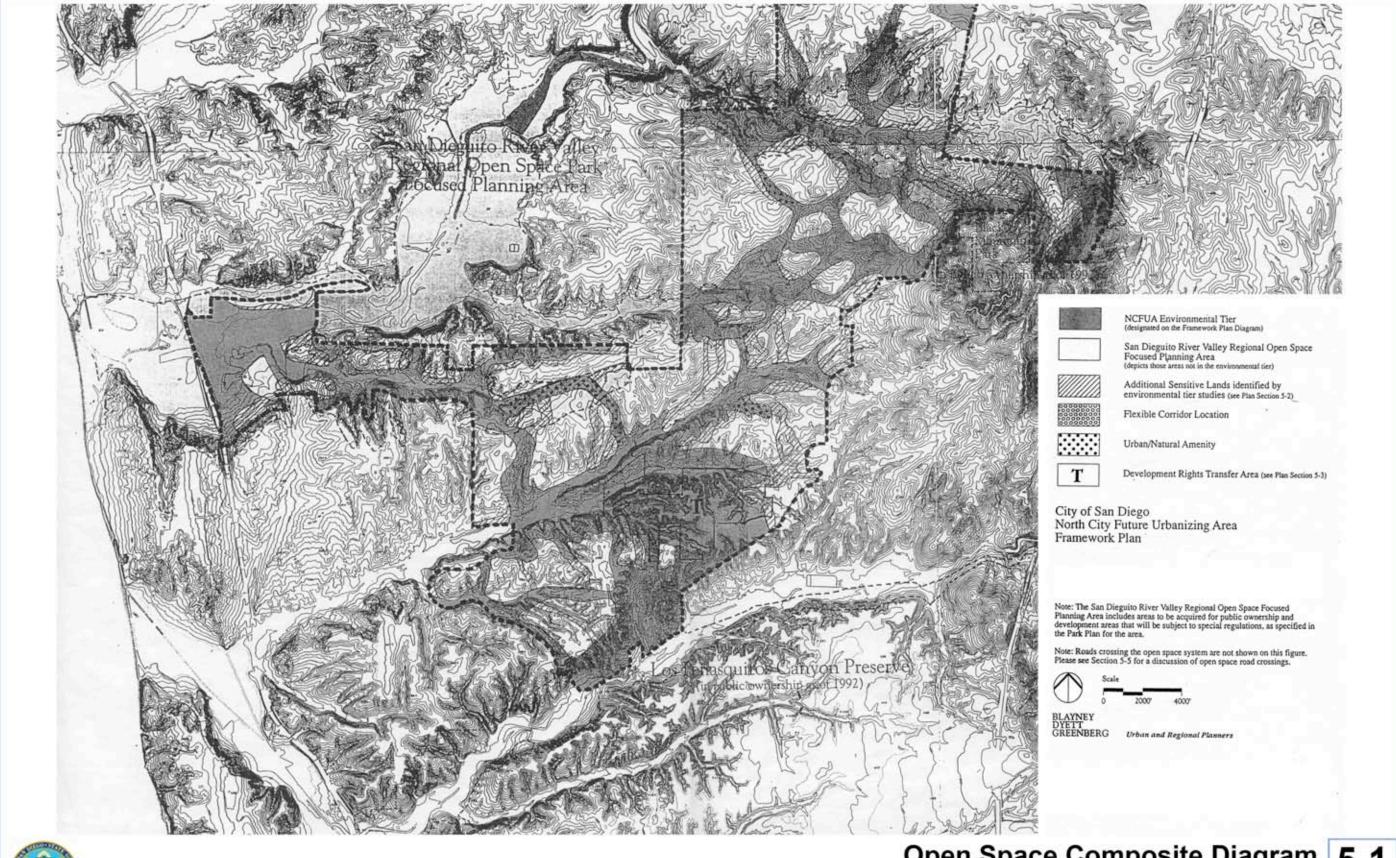
One of the reasons that the NCFUA remained largely undeveloped while surrounding areas became urbanized is its irregular and varied topography and high natural resource value. Retention of these qualities is a key objective of the Framework Plan, which identifies lands to be retained in permanent open space and establishes principles for sensitive treatment of natural features in development areas.

In-depth study of the natural resources of the NCFUA was initiated as part of the Environmental Tier Project called for in the City's General Plan 1990 Guidelines for Future Development. The Environmental Tier Project has the following objectives:

- Identify lands containing significant sensitive resources that need protection, including biologically and culturally sensitive areas, as well as floodplains, unique landscape features, and significant topography that should be retained.
- Identify wildlife movement corridors and other open space connections that are needed to link the major parks, reserves, and significant resource areas within and outside of the future urbanizing area.
- Layout a conceptual open space system that serves to protect and conserve sensitive natural resources of the Future Urbanizing Area and that provides links to the Peñasquitos Canyon Preserve, the San Dieguito River Valley, and Black Mountain Park.
- Create a viable open space system that functions in a multi-faceted, multiple-use manner, and includes or provides for such features as habitat protection and preservation, wildlife and habitat restoration, and recreational opportunities.

The environmental tier effort entailed gathering data on numerous environmental and land use factors, transferring the data onto maps and entering the data into ARC/INFO, a type of computerized Geographic Information System (GIS). Staff members then assigned a rating to each category of data and produced multiple overlays of assorted data layers to analyze various combinations of environmental factors. Based on these overlays and knowledge of landscape ecology and conservation biology principles, initial environmental tier maps were prepared. These maps were used in design of the Framework Plan and were refined to integrate the environmental tier with other planned land uses. **Figure 5-1** is a composite diagram showing the environmental tier with other open space information.

The Environmental Tier Project contributed resource information to the Multiple Species Conservation Program (MSCP). The MSCP addresses habitat preservation needs in the entire metropolitan sewer service area. The MSCP may provide new information or implementation strategies.



Open Space Composite Diagram 5-1

#### 5.1 GUIDING PRINCIPLES: OPEN SPACE

- 5.1a Create the environmental tier, an interconnected, viable system of natural open space that serves to protect and conserve cultural resources, flora and fauna that occur in the NCFUA.
- 5.1b Conserve biological diversity by setting aside relatively large areas of natural open space/habitat, linked with corridors, and protected from human activities detrimental to this purpose.
- 5.1c Preserve floodplains and significant topographic features such as canyons, ridges and hillsides.
- 5.1d Promote subarea- and project-level planning that preserves as open space significant natural features within development areas (see principles in **Section 4, Urban Design**).
- 5.1e Provide for refinement of the environmental tier as shown on the Framework Plan diagram based on field assessment of resources and detailed land use planning.
- 5.1f Within the environmental tier, provide for some low-impact forms of recreation such as walking, bicycling and nature watching.

# 5.2 IMPLEMENTING PRINCIPLES: DELINEATION OF FINAL ENVIRONMENTAL TIER BOUNDARIES

- 5.2a The environmental tier shown in the Framework Plan diagram may be refined during subarea and project planning provided such refinements are consistent with the principles of this section.
- 5.2b All linear corridors in the environmental tier must be a minimum of 1/8 mile in width. This may include some transitional areas which permit recreational activity.
- 5.2c Changes to linear corridors in the environmental tier will be allowed as part of subarea plans only if all of the following guidelines are satisfied:
  - Linear corridors may be moved to another location as long as opportunity for wildlife movement is equivalent to the opportunity provided by the corridor shown on the Framework Plan diagram, and the new location provides for as much or more width, native plant habitat, ability for cover, and protection from human activity as the previous location. The corridor must have the same geographic relationship to open space areas being connected, whether they are in or outside of the NCFUA.

- The new location must be in as much of a direct line to the major open space areas as the previous location, with no bottlenecks, winding curves or turns that might inhibit wildlife movement.
- If native habitat is not present or is in a degraded state in the new corridor, the corridor must be revegetated.
- If the designated corridor has sensitive resources that should be preserved on site, changing the location may not be allowed.
- 5.2d Because of the importance of continuous open space that provides for plant and animal movement, portions of the environmental tier may not be eliminated based solely on an absence of sensitive resources within the area designated. Function as an open space corridor or groundwater recharge area may be sufficient to warrant inclusion in the environmental tier.
- 5.2e Whenever possible, preserve 100-year flood zones as open space. Where it is necessary to floodproof a property, require the least possible alteration of the natural drainage pattern, and minimize impacts to downstream properties.
- 5.2f Where feasible, "additional sensitive lands" shown on **Figure 5-1** should be preserved as open space through the site planning process. If preservation is not possible, uses permitted in transition areas would be appropriate (see **Table 5.4-A**).
- 5.2g Where feasible, the environmental tier should incorporate entire geographic and topographic features (i.e., canyons and drainages shall be preserved from rim to rim or edge to edge).

# 5.3 IMPLEMENTING PRINCIPLES: SECURING ENVIRONMENTAL TIER LANDS AS PERMANENT OPEN SPACE

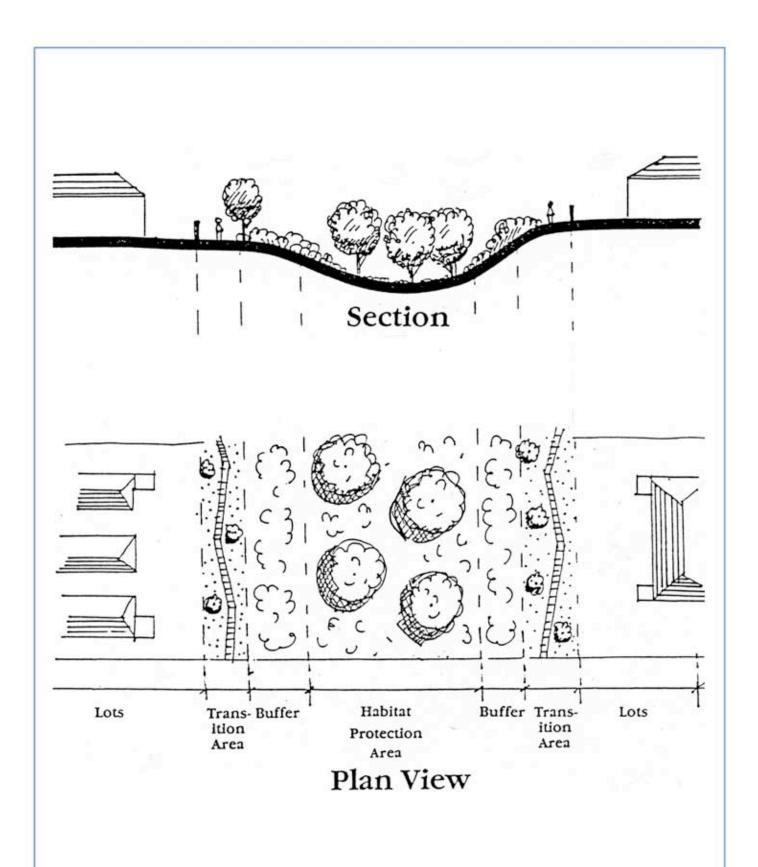
5.3a Secure the environmental tier as permanent open space through purchase and conveyance to a public agency or non-profit land trust, or deed restrictions that limit uses. A variety of mechanisms are to be used including the following:

#### For Parcels Designated Partially as Environmental Tier

- Requirements that projects within the NCFUA dedicate lands shown within the environmental tier on the Framework Plan diagram.
- Implementation of current regulations regarding development of sensitive lands.

### For Parcels Designated Entirely as Environmental Tier (app. 5230 acres)

- Preservation of environmental tier lands as mitigation for significant impact on habitat in other locations within or outside of the NCFUA.
- Purchase using development fees.
- Purchase using revenue from future bond issues dedicated to open space preservation.
- Preservation through mechanisms that may be developed by the Multiple Species Conservation Program.
- Transfer of development rights as described in **Policy 5.3b**.
- Option of land by a public or non-profit agency to take land off the market temporarily, providing time for the other preservation strategies, to take effect, as described in this policy.
- 5.3b Establish a voluntary Transfer of Development Rights Program in the NCFUA based on the following guidelines:
  - Transfer areas are shown in **Figure 5-1**. All areas designated for estate, very low, and low-density residential use are receiving areas provided that increased densities do not change projected traffic levels of service as shown in **Table 6.3-A**. Purchase of land in identified transfer areas and dedication of title or easement to the City will entitle the purchaser to transfer development rights to any property in receiving areas. The transferred development right would be added to the base land use designation depicted on **Figure 3-2**. The development entitlement to be transferred is one dwelling unit per acre of land preserved.
  - The sale of land will be a market transaction. In order to receive the additional density afforded by transferring development rights, applicants seeking approval of a project in a designated receiving area will be required to demonstrate, at the time the application is approved, that they have an option to purchase land in designated transfer areas. Preservation of transfer areas will be required as a condition of project approval.
- 5.3c Owners of affected land and the City should work together, along with a non-profit land trust, to option the parcels at an agreed-upon value. A priority listing of parcels should be prepared to determine the order in which parcels will be purchased as funds are generated.
- 5.3d The City will decide on a case-by-case basis whether to accept land in fee or easement. Maintenance and monitoring financing will be required through the discretionary permit review process.
- 5.3e Development should be clustered on the less sensitive portions of the site.





Open Space Management Zone Concept
North City Future Urbanizing Area Framework Plan

## 5.4 IMPLEMENTING PRINCIPLES: ENHANCEMENT AND MANAGEMENT OF ENVIRONMENTAL TIER LANDS

5.4a As part of subarea and project planning, environmental tier lands are to be divided into management zones. The zones are defined as follows, with allowable and prohibited uses identified in **Table 5.4-A**. The open space management zone concept is illustrated in **Figure 5-2**.

**Habitat Protection Areas.** These areas serve to protect and preserve natural resources throughout the NCFUA, providing for habitat and movement needs of the native plants and animals. The environmental tier lands shown on the Framework Plan diagram are, for the most part, expected to be designated as habitat protection areas (see policies in **Section 5.2** relative to changes in environmental tier delineation).

No non-local native vegetation shall be allowed to be planted within these areas. Local native vegetation, if unavailable from on-site, can be obtained from sites with similar soils, slope, aspect, meso- or micro-climates as those on-site, preferably from nearby local sites within a ten-mile radius of the site.

**Biological Buffer Areas.** These are areas of native habitat where low-impact forms of recreation can occur (such as trails), but which primarily function to provide distance and protection to the habitat protection area from lights, noise, activity, exotic plants and other potential forms of disturbance. Buffer areas will generally be created at the perimeter of development areas shown on the Framework Plan diagram, and shall be a minimum of 100 feet wide.

No non-local native vegetation shall be allowed to be planted within these areas. Local native vegetation, if unavailable from on-site, can be obtained from sites with similar soils, slope, aspect, meso- or micro-climates as those on-site, preferably from nearly local sites within a ten-mile radius of the site.

**Transition Areas.** These are areas outside of the Buffer and Habitat Protection areas, used for landscaped transitions to developed areas. These areas should generally add an additional 25-50 feet of distance between the open space system and developed areas, in order to provide for the transition from native habitat to the generally non-native, developed areas. Local native vegetation should be used as much as possible; introduced drought-tolerant species may also be acceptable. These areas can provide for trails for pedestrian, bicycle, or equestrian uses.

Transition areas shall use native or drought-tolerant, locally adapted plant species that serve to provide a smooth visual and functional transition between the native buffer zone and landscaped areas. Transition areas should prevent detrimental animal and plant species from invading the buffer and habitat areas, and to additionally protect those areas from the impacts of lighting or noise (especially if the buffer zone is sage scrub).

Transition areas shall not be planted with non-native species invasive to the habitat or buffer zones.

TABLE 5.4-A
OPEN SPACE MANAGEMENT ZONE USES

Management Area Category	Allowable Uses	Prohibited Uses
Habitat Protection Area	Wildlife and plant protection (paramount)	Most structures
	Scientific Study	Any new facilities that create barriers between open space units or degrade the quality of the habitat  Active recreation facilities, including golf courses and parks
	Ecological tours and nature walks	
	Storm drainage and natural water filtering	
	in specific areas	
	Habitat restoration	
Biological Buffer	Nature walks, hikes, wildlife viewing	Most structures
	Picnics in designated areas	Any new facilities that create barriers between open space units
	Bicycling on designated trails only	
	Equestrian uses on designated trails only	Active recreation facilities, including golf courses and parks
	Storm drainage and natural water filtering	Brush management areas
	Habitat restoration	<u> </u>
	Floodplain	
Transition Area	All uses as in buffer areas, gardens, common landscaped areas, golf courses and parks	Most permanent structures
	Brush management	

Note: All three management zones may include land preserved in open space in order to avoid natural hazards. Source: Blayney Dyett Greenberg

- 5.4b In addition to the three management zones described in **Principle 5.4a**, subarea and project plans should identify areas of open space that provide natural components to more developed areas and link to the open space system. These will be within development areas shown on the Framework Plan diagram, and should be delineated using the Open Space Composite diagram (**Figure 5-1**). Activities within these areas may be restricted to emphasize habitat preservation, or may allow community gardening, golf courses, hiking, biking, and equestrian use.
- 5.4c Wildlife corridors shall be the width required to provide for a continuous space in which animals can move without fear, undisturbed by lighting, noise and intense human activity. The corridor should provide fully functional indigenous habitat throughout. (A minimum width for major wildlife corridors shall be 1/8 mile.)
- 5.4d Development projects subject to the Resource Protection Ordinance will be required to conform to the ordinance and to subarea plans. When strict compliance with the ordinance is infeasible, mitigation will be required.

- Subarea plans must describe how mitigation will be accomplished. The preferred form of mitigation will be the purchase and dedication of land on Del Mar Mesa. Purchase of land shall occur at the project approval stage, and purchases will be market transactions between property owners.
- 5.4e Wildlife corridors shall not have trails and recreation allowed within them where that activity might impede animal movement or other faunal needs for breeding, nesting, foraging, resting, etc., or otherwise detrimentally affect the corridor's function. Recreational trails are permitted in buffer and transition areas, and in natural/urban amenities depicted on **Figure 5-1**.
- 5.4f No concrete, asphalt, riprap, or other channelization structures will be allowed within the open space system's drainage areas or floodplains. Floodplain banks will be revegetated with appropriate native species (riparian scrub or woodland, chaparral, or sage scrub), restoring drainage areas and floodplains to fully functional ecosystems.
- 5.4g Water retention areas and ponded runoff filtering systems may be allowed in portions of the open space system. No water entering the open space system through storm water runoff pipes and facilities shall enter at a speed causing erosion or other detrimental effects to the natural ecosystem. Drainage areas shall be thickly vegetated with native species to prevent erosion and to help filter water. Check dams and sedimentation ponds may be placed within the buffer or transitional areas, to slow water entering as urban runoff, and to catch sediments and help filter water.

## 5.5 IMPLEMENTING PRINCIPLES: ROADS IN AND ADJACENT TO THE ENVIRONMENTAL TIER

- 5.5a Where it is essential that a road cross the environmental tier, bridge structures shall be required to provide unobstructed wildlife corridors. Structures should be designed and built to minimize the need for alteration of natural landforms.
- 5.5b Road crossings of the environmental tier are to be limited to the roads shown on the Framework Plan diagram and collector streets essential for area circulation. Local streets should not cross the environmental tier except where needed to access isolated development areas or in areas shown as urban/natural amenities in **Figure 5-1**. Subarea transportation planning must minimize environmental tier crossings.
- 5.5c Filling of canyons or valleys shall be avoided, and roads shall not be placed in the bottom of canyons or be allowed to act as barriers or impediments to wildlife movement or the survival of native species.
- 5.5d Where roads enter and traverse portions of the open space system, provisions shall be taken to provide for wildlife movement across the road a minimum of

once every 1/2 mile. Where flat terrain is encountered, an overhead structure for animal crossings may be constructed. A prototype might be built and monitored to see if it is viable as mitigation for road impacts. This structure would be moderately sloping (no steeper than 3:1), with soil and native plant cover, and fenced.

- 5.5e Roads shall be narrowed when they cross the open space system, at a minimum to eliminate parking, turn lanes and median strips. Where topography and resource sensitivity permit, bicycle and pedestrian ways should be within the environmental tier rather than comprising a portion of the road structure. This will both reduce the width of structures and provide a more interesting experience for bicyclists and pedestrians.
- 5.5f Roads which cross the loo-year flood plain shall be constructed above grade, using bridge or causeway structures.